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EXAMINER

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/636,034

Applicant(s)

HARDER, WILLARD J.

Examiner

Victor MacArthur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-12,15-23,25,26,28,30-35,38 and 40-42 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 5,10,11 and 16-22 is/are allowed.
6) ☒ Claim(s) 1,4,6-9,12,15,23,25,26,28,30-35,38 and 40-42 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 4 and 15 are objected to because of the following informalities:

- In claims 4 and 15, the limitations “the adjacent first ball knobs”, “the adjacent second ball knobs” and “the adjacent spindles” lack proper antecedent basis. The phrase “adjacent” should be deleted for consistent claim terminology.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 6-9, 12, 15, 23, 30, 31, 38 and 40-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Roth U.S. Patent 1772159.

Claim 1. Roth discloses (figs.1-6) a railing comprising: laterally spaced upright posts (p.1, ll.1-5), a top rail (9) extended between and connected to the posts (p.1, ll.1-5), a bottom rail (8) located below the top rail and extended between and connected to the posts, a plurality of laterally spaced upright spindles (7, 22) extended between the top and bottom rails, first ball knobs (top 23), first fasteners (top 13) attaching the first ball knobs to the top rail, second ball knobs (bottom 23), second fasteners (bottom 13) attaching the second ball knobs to the bottom rail in general vertical alignment with the first ball knobs, the spindles having opposite ends (top

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and bottom ends of 7) with inside walls (inside walls of 22) located in telescopic relation (in as much as the applicant's invention is telescopic) with the first and second ball knobs thereby anchoring the spindles on the rails, a first spacer (top 10 as described in p.1, ll.55-57) located between the first ball knobs and the first rail, the first spacer comprising a first plate (portion of 10 between 9 and 7) located in engagement with the top rail between the posts, the first fasteners retaining the first spacer in engagement with the top rail and connecting the first ball knobs to the top rail, and a second spacer (bottom 10) located between the second ball knobs and the bottom rail, the second spacer comprising a second plate (portion of bottom 10 between 8 and 7) located in engagement with the bottom rail between the posts, the second fasteners retaining the second spacer in engagement with the bottom rail and connecting the second ball knobs to the bottom rail.

Claim 4. Roth discloses that the first and second plates have laterally spaced holes (portions of 10 receiving 13) for the first and second fasteners thereby laterally spacing the first ball knobs and second ball knobs and spindles.

Claim 6. Roth discloses that the spindles are linear tubes having open opposite ends telescoped in tight fit engagement around the first and second ball knobs (as seen in fig.5).

Claim 7. Roth discloses that the inside walls (inside walls of 22) have inwardly directed projections (14a) engageable with the first and second ball knobs to inhibit rotation of the spindles relative to the first and second knobs.

Claim 8. Roth discloses that each of the first and second ball knobs have a spherical body having an annular convex side wall located in a tight frictional contact with an inside wall of the spindle (as seen in fig.5).

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Claim 9. Roth discloses that the convex sidewall includes a plurality of spaced circumferential outwardly extended continuous ribs (portions of 23a above and below 14a, as seen in fig.6) located in bias contact with the inside wall of the spindle.

Claim 12. Roth discloses a railing comprising: a top rail (9), a bottom rail (8) located below the top rail, a plurality of laterally spaced upright spindles (7, 22) extending between the top and bottom rails, first ball knobs (top 23), first fasteners (top 13) attaching the first ball knobs to the top rail, second ball knobs (bottom 23), second fasteners (bottom 13) attaching the second ball knobs to the bottom rail in general vertical alignment with the first ball knobs, the spindles having opposite ends (top and bottom) with inside walls (inside walls of 22) located in telescopic relation (in as much as the applicant's invention is) with the first and second ball knobs thereby anchoring the spindles on the rails, a first spacer (top 10 as described in p.1, ll.55-57) comprising a first plate (portion of 10 between 7 and 9) located in engagement with the top rail spacing the first ball knobs and spindle from the top rail, the first fasteners retaining the dist plate in engagement with the top rail and connecting the first ball knobs to the top rail, a second spacer (bottom 10) comprising a second plate (portion of bottom 10 between 7 and 8) located in engagement with the bottom rail spacing the second ball knobs and spindle from the bottom rail, the second fasteners retaining in the second plate in engagement with the bottom rail and connecting the second ball knobs to the bottom rail.

Claim 15. See rejection of claim 4 above.

Claim 23. Roth discloses (figs. 1-6) a tube (22) having an open end and inside wall (inside wall of 22), and a ball knob (top 23) adapted to be secured to a support (9), the ball knob comprising a spherical body (body of 23) having an annular convex curved side wall (side wall

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of 23), a hole extended through the body for accommodating a fastener to secure the knob to a support and a plurality of laterally spaced and outwardly extended continuous annular ribs (rib surrounding left 14a, and rib surrounding right 14a) on the annular convex curved side wall of the body, the open end of the tube being telescoped around the convex curved side wall with the annular ribs biased into engagement with the inside wall of the tube.

Claim 30. Roth discloses that the body has a top surface, the annular convex curved sidewall has an outwardly curved annular shape portion extended downwardly from the top surface of the body to the annular ribs (as seen in fig.6).

Claim 31. Roth discloses a ball knob for anchoring a tube having an inside wall to a support comprising: a spherical body (23a) having a top surface (top surface of 23a), a bottom surface (bottom surface of 23a), and an annular convex curved sidewall (sidewall of 23a), a plurality of laterally spaced and outwardly extended continuous annular ribs (annular rib surrounding left 14a, annular rib surrounding right 14a) on the annular convex curved side wall of the body adapted to be located in biasing engagement with the inside wall of the tube, a hole in the body (hole within 23a) extended between the top and bottom surfaces for accommodating a fastener to secure the knob to the support.

Claim 38. Roth discloses that the annular convex curved sidewall has an outwardly curved annular shape extended downwardly from the top surface of the body toward the annular ribs (as seen in fig.6).

Claim 40. Roth discloses a ball knob (23a) for anchoring a tube having an inside wall to a support comprising: a spherical body (body of 23a) having a top surface (top surface of 23a), a **generally** (but not completely) flat (in that it is smooth) bottom surface (bottom surface of 23a)

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adapted to be located in surface engagement with the support, and a continuous annular convex curved side wall (side wall of 23a) adapted to be located in tight frictional engagement with the inside wall of the tube, and a hole (hole in 23a receiving 13) in the body extended between the top and bottom surfaces for accommodating a fastener (13) to secure the knob to the support and retain the bottom surface in surface engagement with the support.

Claim 41. Roth discloses at least one outwardly directed annular rib (rib surrounding left 14a) on the convex curved sidewall of the body adapted to engage the inside wall of the tube.

Clam 42. Roth discloses a plurality of laterally spaced and outwardly extended annular ribs (left rib surrounding left 14a, rib surrounding right 14a) on the convex curved sidewall of the body adapted to engage the inside wall of the tube.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth U.S. Patent 1772159 in view of Hannum U.S. Patent 4645598.

Claims 25 and 32. Roth discloses that the body is a one-piece member but is silent regarding the material of the body. However, the cross-hatching in the figures illustrates metal see MPEP §608.02. Hannum teaches (col.2, ll.3-7) that it is beneficial to replace metal parts

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with plastic because they are non-corrosive, energy efficient, light weight, less costly to install or repair, and have proven to be superior in wear and performance. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to make the Roth body from plastic, as taught by Hannum, for the purpose of reducing weight and cost while improving performance.

Claims 26, 28 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth U.S. Patent 1772159.

Claims 26, 28 and 33-35. Figures 5 and 6 of Roth disclose that the body is a spherical member (figs. 5 and 6). Figure 4 of Roth shows the body as being truncated at the top and bottom such that the top surface is a flat circular surface and the bottom surface of the body is a flat circular surface. It has generally been recognized that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the shape of spherical body of figures 5 and 6 to be truncated at the top and bottom, as shown in figure 4, since such practice is a design consideration within the skill of the art and no new and unexpected results are produced.

Allowable Subject Matter

Claims 5 and 16 are allowed for reasons detailed in the previous office action. Claims 10 and 11 depend from claim 5 and are thus similarly allowed. Claims 17-22 depend from claim 16 and are thus similarly allowed

Response to Arguments

Applicant's arguments with respect to allowed claims 5, 10, 11 and 16-22 are moot. The remaining arguments have been fully considered but they are not persuasive.

The applicant argues that claims 1,4,6-9,12,15,23,25,26,28,30-35,38 and 40-42 have been amended to contain newly added limitations which overcome the prior art. This is not persuasive since the prior art, as newly applied in the rejections above, read upon the claims as amended.

The applicant argues that spacer plates with laterally spaced holes are not disclosed in the prior art. This is not persuasive since Roth discloses spacers (10 as described in p.1, ll.55-57) located between the first ball knobs and the rails, the spacers comprising a plates (portions of 10 between 9, 7 and 8). Spacers (10) are laterally spaced from one another and thus so are the spacer plates.

The applicant argues that Roth does not disclose a spherical ball knob with a flat top and flat bottom surfaces. This is not persuasive since fig.6 shows a spherical ball knob and figure 4 shows a ball knob with flat top and bottom surfaces. As detailed in the rejection above it would have been obvious to modify the fig.6 embodiment in view of the figure 4 embodiment.

The applicant argues that Roth does not disclose a ball knob having a continuous annular ribs. This is not persuasive since elements 14a are conical depressions within 23a. as such each depression forms an annular rib at its outermost point. As seen in cross section in figure 6 these annular ribs (left and right) are located in biased engagement with the inside wall of tube 22a.

The applicant argues that the Roth ribs do not each extend around the circumference of the convex curved sidewall of block 23a at . The question of whether or not this is true is irrelevant since the claims do not specifically recite that each rib extends around the

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circumference of the convex curved sidewall of block. Furthermore, note that circumference does not necessarily require being located at the largest diameter of the object, such that the ribs surrounding left 14a and right 14a do extend around a circumference of the block 23a, albeit a small circumference. Note that the applicant's own ribs are not all located at the largest possible circumference.

The applicant argues that it would not have been obvious to modify Roth in view of Hannum since the applicant's motivation for using plastic differs from the motivation recited by the examiner in the rejection of claims 25 and 32 above. This is not persuasive. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701.

The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



VLM

November 13, 2004



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